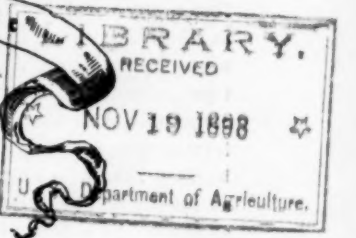


MASSACHUSETTS PLOUGHMAN



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MASSACHUSETTS PLOUGHMAN

Official Organ of the N. E. Agricultural Society

LINUS DARLING,

Proprietor.

ISSUED WEEKLY AT

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No paper discontinued, except at the option of the
proprietor until all arrearages are paid.

All persons sending contributions to this
PLOUGHMAN for use in its columns must sign
their name, not necessarily for publication, but
as a guarantee of good faith, otherwise they will
be considered as being sent to the waste-basket. All matter
intended for publication should be written on
one side of paper, with ink, and upon but one side.
Correspondence from particular farmers, giving
the results of their experience, is solicited.
Letters should be signed with the writer's real
name, in full, which will be printed or not, as
the writer may wish.

The PLOUGHMAN offers great advantages to ad-
vertisers. Its circulation is large and among the
most active and intelligent portion of the com-
munity.

Rates of Advertising:

12 1-2 cents per line for first insertion.

6 1-4 cents for each subsequent insertion.

AGRICULTURAL.

PRUNE the orchard trees this winter,
but don't butcher them. Have a reason
for every stroke.

THE loss in weight of corn cured
in the silo ought not to exceed five
to eight per cent, if silage is properly
stored.

CEMENT makes a good door-step.
Get a box of the right size and shape,
fill it with the mixed cement, let it
harden, and knock the box away.

HALF a bushel of potatoes a day for a
milk cow is the top limit recommended
by Professor Ford. More than that
affects the quality of the milk he says.

LIVE stock which looks well in
November should look well in April.
Juicy food and a fine amount of grain
will keep them all right.

WHEN buying, ask three questions.
First, "Do I need this?" Second, "Am
I getting it as cheaply as anybody can?"
Third, "Shall I get my money back in
any way?"

PRICES of apples are up and down from
year to year, but the grower who takes
care of his orchard is sure to strike the
market right sometimes. Take care
of the young orchard.

Now that the harvest of ballots has
been gathered, even the political farmer
can afford to pay some attention to the
crops which bring him his living. It
is noticeable that the most successful
farmers usually trouble themselves but
little about politics.

WITH corn-meal at \$20 a ton, it is
estimated that potatoes are worth about
twelve cents a bushel for stock feeding.
It hardly pays to feed them if there is
any market demand, but a few of
them should be fed for the sake of the
good effect of a little juicy food.

DR. BAILEY summarizes the effects of
tillage thus: It sets plant food free,
promotes nitrification, supplies air to
the soil and roots, makes all soil avail-
able by finding it, breaks up the hard
pan, makes a reservoir for water, warms
and dries the soil, saves moisture,
sends the roots of trees downward and
makes the moisture and fertility of the
soil available.

RAIL fences are not easy to keep in
repair and they are usually accompanied
with stones and rubbish. Stone walls
cost much labor, and occupy too much
room. Board fences are too costly and
a combined slat and wire fence is neither
handsome nor durable. The only really
modern satisfactory means of enclosure
is the stout close mesh wire affair which
looks and lasts well, confines any kind
of stock, from chickens up, and keeps
out foxes, dogs and other pests.

Fattening Sheep.

Results of trials at the Wisconsin sta-
tion declare corn to be the most profit-
able grain for fattening sheep, but it
was found also that the other grains
must be fed with it to maintain the
appetites of the sheep and to keep them
healthy. The most successful practice
was to start the fattening with oats or
bran, then introduce as much corn as
possible, and finish the fattening process
with a mixture of one part oats, one
part linseed meal and three parts corn
by weight.

Wintering Onions.

The freezing process is a good way
to keep onions sound throughout the
entire winter. The whole idea is to
freeze them and keep them frozen. But
the temperature should not be allowed
to go below 15 degrees as very severe
freezing injures the bulb.

Store the onions in a barn, a pit, or
any place where they will be partly pro-
tected, let them freeze, then cover with
hay, straw or bagging and let them stay
until they thaw out of themselves in
spring weather. If the floor of the
store house is not perfectly dry hay or
straw should be put under the onions.

Milk That Will Keep.

Clean milk cooled as soon as drawn
and kept in a cool place will stay sweet
longer than new milk which has been
carelessly cooled and handled and kept
in a dirty dish. Thus old milk is
sometimes fresher as far as practical
keeping qualities is concerned than new
milk. This is a point which should be
better appreciated by those who carry
on milk routes. Lowering the tempera-
ture puts the bacteria to sleep and
prevents their getting so numerous to
do any harm for some time. On the
other hand warm milk is exactly the
material in which bacteria which cause
sourness like to grow and multiply.
Thoroughly strain and cool the milk,
and keep it cool until delivered to the
consumer, and milk will nearly as well
keep as long as it is wanted to keep.
This care in straining and cooling is
important in winter as well as summer.
Says Prof. Woll:

"Among our farmers and milk dealers
there is a general belief that cooling is
necessary only during the hot season—
an opinion to which I most emphatically
take exception. It is possible during
the cold season to haul the milk even
to a somewhat distant creamery without
previous cooling and keep it sweet; but
the development of the bacteria will not
be sufficiently checked by this method.
The results do not appear at once but
are felt later on, as the products from
the milk will not keep well. A quick
and efficient cooling of the milk is a
strong remedy to regulate and counter-
act the development of the bacteria
found in it. It is my opinion that high
grade dairy products can only be made
on farms where sufficient quantities of
ice are used in the handling of the milk."

Cooling cannot be properly done by
setting large cans into cold water be-
cause the bacteria have already gained
somewhat of a start before the milk in
the middle of the can is cool. Yet this
method is much better than none.
Those who have any considerable quan-
tity of milk will find it profitable to
buy an aerator.

Pasteurizing Milk.

ED. MASSACHUSETTS PLOUGHMAN:

DEAR SIR: Will you kindly furnish an
old subscriber with information about
pasteurizing. Whether there is any
simple method to prepare it so that, it
will be safe for food for infants? Can
milk be pasteurized after it has been
drawn for some time. A. P. R.
Brookline, Mass.

[Milk is easily pasteurized for home
use and the operation practically frees
the milk of bacteria. It is much better
to use fresh milk for pasteurizing, but
if the milk has been properly cooled it
will not be in bad condition when de-
livered and can be pasteurized by the
customer. One of the most common
causes of sickness among infants is poor
milk. It should be stated however,
that pasteurized milk does not agree
with some children. A simple and ef-

fective process is that recommended by
R. A. Pierson of the United States dairy
division. "One or more bottles nearly
full of milk are plugged with dry absor-
bent or other clean cotton and placed in
an upright position in a vessel having a
false bottom, and containing enough
water to rise above the milk in the bot-
tles. The vessel is closed, placed on the stove
and heated until the water is 155 degrees
Fahrenheit in winter, or to 180 degrees
(or even to boiling if special precautions
are deemed necessary) in summer. It
is then removed and kept tightly cov-
ered for half an hour. A heavy cloth
over the pail will help retain the heat.
The milk bottles are then taken out,
cooled as quickly as possible by cold
water or ice, and kept in a cold
place. Milk thus prepared may be ex-
pected to keep twenty-four hours, and
should preferably be used within that
time. The cotton plugs should be kept
as dry as possible and should not be re-
moved until the milk is used. A cov-
ered tin pail answers well for the larger
vessel. An inverted pie pan with per-
forated bottom can serve as the false
bottom. A hole may be punched in
the cover of the pail, a cork inserted,
and a chemical thermometer put through
the cork so that the bulb dips in the
water, thus enabling one to watch the
temperature closely without removing
the cover, or an ordinary dairy thermom-
eter may be used from time to time by
removing the lid.

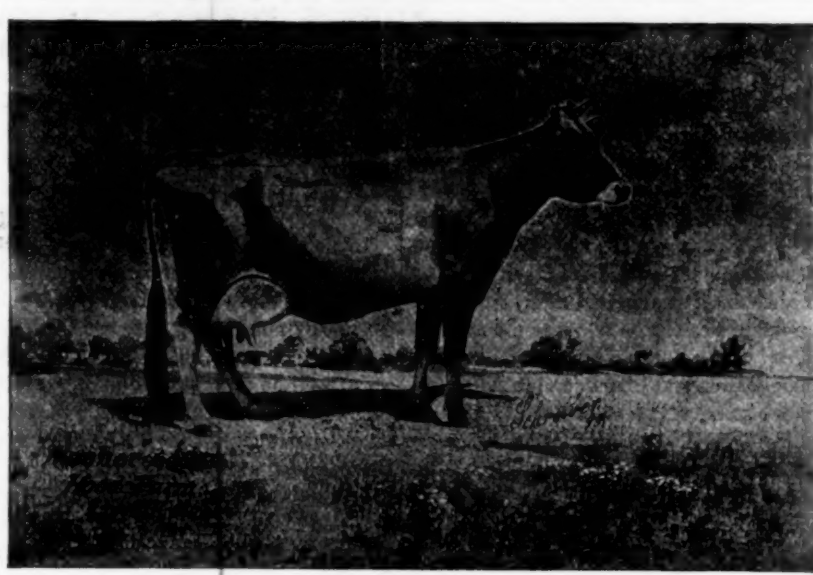
"Breezy Meadow" Notes.

ED. MASSACHUSETTS PLOUGHMAN:

I think it is now high time that I
offer another report "from the field
assigned me," as the professor at Dart-
mouth used to say at the monthly con-
ferences for missions. And this time
I have an unusual batch of cheering
items.

All has gone smoothly at Breezy
Meadows, and I can see a steady im-
provement in my onward march to be a
skilled farmer with eighty acres, all
showing the result of work and thought.
I really did not know half the pretty
work and beauties of my own place,
until I took time this summer to cut
away scraggly shrubbery (there's an
expressive alliteration!) that hid and
deformed what had once been a good
hay piece. I also had the brook let out
to view, from a dense growth of alders,
and a pond lily swamp shown in its
entirety for the first time. My grove is
greatly improved by the wise cutting of
underbrush and dead or sickly, crooked
trees by a man who knew all about the
Maine woods and spends his winter in
"logging" there. Two old stone walls
have been taken down and the large
stones used as a foundation for an ice
house and in keeping out the big rats
from the hen houses. Roads have been
made by cutting a few trees, or carting
loads of gravel, so that I can now drive
an hour on my own acres. Big clumps
of tall pines have been allowed to show
themselves, and my hemlock and privet
hedges have been trimmed by a special-
ist, greatly to their improvement. I
have set out more than three hundred
trees in the last four years, and they are
doing well, and are a constant source of
joy and pride. With some farmers, a
brook is only handy for the cattle to
drink at, and is so sheared off, as to its
bank, as to look much like a trench or
prolonged ditch, and trees along its
edges are ruthlessly felled as so much
timber. A man who formerly owned
this farm remarked that he did all he
could to get the trees away from the
brook, and now I was setting in as
many as he got rid of.

What gives me the greatest satisfaction
is the fact that Providence sent me this
summer, a live, thinking, interested,
conscientious man, who is as much de-
voted to poultry raising as I am, and
for the first time since I bought my
original stock of hens, the hen house
and the fowls are properly, even enthu-
siastically cared for, in up-to-date style.
Go out to the yards, at any time I will,
and I see the roosts and under platform
clean, the air is untainted with bad
smells, the nest-boxes are kept in right
condition, the water is fresh daily, there
are no long dangling cobwebs, no dirty
windows. And as a result, the occu-
pants of this comfortable establishment,



MASHER, 64950.
Owned at Hood Farm. A daughter of Merry Maiden.

carefully stimulated during their moulting
season, are now creaking about,
with red combs and daily filling my egg
basket. That is a dream realized. One
man said, he "never was partial to
hens," although he was glad to eat good
things made with plenty of eggs. An-
other said, he had "to waste his time
a shovelling hen manure." Another
said that hens did better "to let 'em
alone, and c'an out once a year."

I find the swinging iron trough, made
by F. W. Mann, the every where known
bone-cutter man, the best thing yet, for
food, milk or water. They hold just
enough, can be quickly cleaned and are
easily moved as one wills. I bought
six of these and can cordially recom-
mend them. I have a great variety of drink-
ing fountains large and small, but have
packed them and sent them to the attic
as too much bother. I didn't use to
believe in that much-advertised bone
cutter because I got one that really
ought to have been worked by steam or
horse power. My men used to growl
about it, occasionally swearing I fear,
and when it was found broken I sur-
mised that there had been a fixed deter-
mination to get rid of turning it. So
for two years I have bought ground
tone, for this kind of food hens simply
must have. This fall, inspired with
new courage, I tried a smaller size,
greatly improved and, too, I daily turn
it, as easily as one grinds coffee, and
the hens crowd about and eat the luscious
fragments as they fall. It is a real suc-
cess, in its present style, and I feel in
duty bound to say so, as I did horribly
abuse the other. Oh, the genuine fan
I've had gathering wagon loads of the
crispy, crackling leaves for the hens and
as bedding for the cows. By the way I
sold two cows, a Jersey and a Holstein,
at excellent prices last month.

Then my chestnuts. Some way or
other, I took time by the forelock this
fall, and gathered my chestnuts before
the squirrels, crows and visitors un-
known, secured them all. I boil and
roast and devour them raw in their first
sweet prime, and scheme to pick my
own huckleberries next summer. That
will be more difficult as they grow
lower.

Best and most gratifying of all, the
ruthless hunters, who each autumn have
tramped through my woods, with dogs
and guns, making me so afraid of a stray
shot, that I dared not go there, have all
kept away, most kindly. It is but
pleasant to come across these selfish
sportsmen, skirmishing wildly about
your grounds in search of something to
kill, and being impudently and scorn-
fully answered if they are politely re-
quested to leave my place. "Guess
this is a free country, we don't hurt you
none," they said, as I called attention to
my notices on half a dozen trees of "no
shooting." I do pray this is a genuine
good-bye, not an au revoir. So many
lives have been sacrificed in Canada,
through a man's mistaking his com-
panion for a deer or rabbit that serious
punishment is now to be the proper
penalty for such criminal carelessness.

Yes, this is certainly my millennial, at
least; my Sabbatical year. No agents
have persisted in pestering me. Per-
haps the destined placard at my gate,
requesting them not to call, enforced by
the stentorian barks of my Bernards,
always on the watch, may have had some
effect.

I am trying the experiment of giving
my men a share of the profits in farm
produce, and a piece of land to work
for themselves. I tell you what this has
a surprisingly vivifying effect on mind
and muscle.

I am collecting a valuable library of
books pertaining to agriculture and a
matters connected with advanced theo-
ries of farming, and it is interesting
reading, much better than a novel,
written because the one praised author
wanted more money, quite unaware
that too much had been written of that
sort already. I particularly value all
the very plain and practical volumes
given us by Prof. S. H. Bailey of Cor-
nell. His "Garden Making" is the last
one I have bought and find it chuck full
of good ideas.

Let it go as millennial rather than
merely Sabbatical this golden year of
mine, for have not the sectmen of
Medway appropriated five hundred dol-
lars to improving the road, from I know
not just where, but to the very end of
my land in their town, and have already
expended it, so one can now drive or
wheel in that direction without being
swamped in mud holes or stuck in sand,
and the wayside growth has been re-
moved, etc., etc. And the geese and I,
just a quartet, continue to enjoy farm
life.
KATE SANBORN.
Metz, Mass.

Practical Field Experiments at the R. I. Experiment Station.

An experiment for comparing the
relative advantage of liming, before
and after seeding land to grass, has
shown most plainly that is far better to
have the lime thoroughly worked into
the soil before seeding, than to top-dress
with it afterwards.

Five rotations of crops are being
tried, the experiments having been be-
gun several years ago. They are as
follows:

Five years' rotation: First year,
clover followed by potatoes; second
year, winter rye which is cut for fodder
and succeeded by winter squashes;
third year, peas followed by Swedish
turnips; fourth year, oats sown with
clover.

Six years' rotation: First year,
Indian corn; second year, potatoe;
winter rye, timothy and red top are
sown after the potatoes are harvested,
and clover early the next spring. Third
year, rye; fourth year, clover and grass;
fifth and sixth years, grass.

Three years' rotation: First potatoes
planted on clover sod. After the re-
moval of this crop the land is seeded to
winter rye, clover seed being sown
the following spring. Second year, rye;
third year, clover. This rotation has
been widely discussed by Mr. T. B.
Terry the well-known agricultural
writer.

Four years' rotation: This is like
the foregoing except that Indian corn is
planted on the clover sod, followed by
second year by potatoes and then by
winter rye and clover as above.

Five years' rotation without clover:
First year Indian corn followed by
potatoes, winter rye and then by
timothy and red top. The grass seed is
sown in the autumn with the rye after
the removal of the potato crop.

Five years' rotation with clover: This
rotation is identical with the foregoing

in every particular, except that clover
seed is sown on the land, in the spring
immediately following the autumn seed-
ing with rye and grass.

Comparisons of the two foregoing
rotations ought to show the relative ad-
vantage, if any, of introducing into a
rotation a leguminous crop (clover),
capable of drawing a portion of its nitro-
gen from the air.

A regular system of manuring, as
well as of cropping is practiced. Rec-
ords are kept of the amounts of the
crops harvested, and the manure ap-
plied, so that at any time one can esti-
mate the relative profit of the different
rotations. In the second rotation de-
scribed, two plots are receiving nothing
but commercial manures and lime, two
others, commercial manures and wood
ashes, and two others, commercial man-
ure, stable manure and lime. It is
hoped to demonstrate in this way
whether or not the fertility of the soil
can be profitably and permanently be
maintained without recourse to stable
manure. These experiments have been
in progress for several years, and should
in a short time begin to yield some re-
sults of interest and value; but like
well known experiments at Rotham-
stead, Eng and, they must be continued
even for many more years before their
fullest value can be measured. It is
hoped to make a study of the results
thus far obtained and to present the
practical features of the same to the
public in the near future.

Farmers and Railroads.

Farmers cannot get along without
railroads, and certain it is that railroads
would be poor property were it not for
the farmers. The interest of railroad
companies and farmers are, or should
be, mutual. There should be a good
understanding at all times between
them. One should not wrong or attempt
to wrong the other. On the other hand,
each should champion and guard the in-
terests of the other as occasion may re-
quire.

It must be admitted, however, that
the farmer has little opportunity to
wrong the railroad, while the railroad
has abundant opportunity to wrong the
farmer by demanding excessive charges
for the transportation of his products.
One does not need to try hard to re-
member when railroads were prosper-
ing, drawing the corn crop of Nebraska
and some other western states, while at
the same time the money that the farmer
got out of the same crop hardly paid
him for drawing it from his farm to the
railroad station, to say nothing about
the use of his land and the labor ex-
pended in raising the crop.

Of course the railroad officials would
claim that they were working on a
very close margin, yet at the same time
they were not only paying good divi-
dends, but in many instances paying
them on stock heavily watered. More
than that, the officials of the roads were
all liberally paid, as were most of the
employees, many engineers, conductors
and even firemen earning in a year more
than many a farmer would receive for
his labor in three years.

The above is not written to stir up ill
feeling between farmers and railroads
but to call attention to the situation,
hoping to suggest some way to improve
it.

The foundation on which any im-
provement must rest is a good under-
standing. Yes, thoroughly good rela-
tions must first be established and then
constant maintenance. And where any
advances are to be made they should
as a rule be first made by the railroads.
This, because they are the stronger
party and the one having all the advan-
tage. Let the railroad companies show
to the farmers on their respective lines
that they appreciate their patronage and
feel an interest in their farming opera-
tions and their successful results, then
the first step towards a good under-
standing has been taken.

Representative railroad men should
meet representative farmers. Where
shall they meet? The answer is that
many good opportunities are to be had
at agricultural conventions and farmers'
institutes, whenever and wherever held.
At such gatherings the officials con-
nected with the freight department of

railroads could learn direct from farmers
what grievances they have or think they
have. And at the same meetings they
could present the railroad's side of the
case.

The writer holds that anything that
tends to make farming pay better helps
at the same time the railroads. There-
fore the latter should do all they can to
encourage farmers to adopt better
methods. The more agricultural meet-
ings held and the better attended the
greater will be the improvement in
agricultural matters in the sections of
the country where held. This is
a statement that can be easily proven
and one of which no intelligent observer
will deny the truth.

Railroads should not only be re-
presented at agricultural meetings, but
they should encourage the holding of
such meetings. Further, they should
sometimes take the initiative in getting
them up. At all times they should
render reasonable assistance to those
farmers who spend their time in or-
ganizing and conducting them.

F. W. MOSELEY.

Clinton, Iowa.

Daughter of Merry Maiden.

Masher 64,950, Owned at Hood Farm,
Lowell, Mass.

It is always interesting and instruc-
tive to pick out individuals from the
Hood Farm herd, and consider their
peculiar qualities. It is especially so
when the individual to be considered is
a daughter of so famous an animal as
the great Merry Maiden, sweepstakes
cow in the World's Fair Dairy Tests.
Such a cow as this is Masher, dropped
May 29, 1890. In color she is solid
dark silver gray, head fine, neck long,
thin over front shoulder, body long and
of good depth, ribs open and well
sprung, thighs flat, back straight, tail
long and good sized, milk veins elastic.
Her udder is large and finely shaped,
running far forward, extending well
up behind and well rounded; her teats
are long and squarely placed.

Masher has a test of 16 pounds 14
1-2 ounces. She is an inbred Diploma.
Diploma has 40 daughters in the 14
pound list and 12 sons that are sires
of tested cows. She is by Damascus, the
sire of four with tests of over 16 pounds
each, and Damascus is a full brother of
Paro's, the sire of one in the 14 pound
list. His full sister, Plumage, test, 17
pounds, 5 ounces, is in the Hood Farm
herd, and carries one of the largest ul-
ders we have ever seen on a Jersey.
The sire of Damascus is Diploma and
his dam is Paradise, 17 pounds, 11
ounces, that has three producing sons
and two daughters in the 14 pound list.
Paradise is a daughter of Combination
and out of Goodbye, test 16 pounds 13
ounces, dam of two in the 14 pound list,
and of Young Combination, the
sire of five tested cows. Goodbye is
also a half sister of Diploma, being out
of Frankie's Lass, the dam of Diploma,
test, 17 pounds 3 1-2 ounces, the dam
of three in the 14 pound list.

Masher's dam, Merry Maiden, test 18
pounds 3-4 ounces in seven days, made
at Chicago in the test, won the grand
award as the champion sweepstakes
cow, all three tests combined, at the
World's Fair. She was the only Jersey
that stood ahead of all other cows in all
other breeds in all three tests. She was
also the richest cow in any breed.
Merry Maiden is by Diploma, and out
of Costa Rica, test, 21 pounds 6 1-2
ounces, 90 pounds 11 1-2 ounces, in 31
days, 44 pounds 12 ounces milk in one
day, 10,258 pounds 7 ounces in one
year, the dam of Chirp, 19 pounds one
ounce. Two of her full sisters are in
the list. She is by Upright, the sire of
12 in the 14 pound list out of 15 regis-
tered daughters, and her dam is the
famous producing cow, Modita, 16
pounds 8 ounces, the dam of 6 in the 14
pound list, and that has three untested
daughters in the Hood Farm herd.
Modita is out of Laura Lee, dam of
five with records over 14 pounds each
by four different sires. Masher is one
of the best inbred Combination cows
living, and that she is handsome and of
good dairy type any one can see by her
picture. Like her famous dam, Merry
Maiden, she is a very rich cow.

[illegible]

POULTRY.

Covered Runs.

There is a considerable advantage in covering the runs with a cheap roof which will keep out most of the rain. If the ground is at all heavy and inclined to get muddy in stormy weather a roof will contribute much to the healthiness of the location.

Nothing is more conducive to sickness and poor egg production than a place where fowls are obliged to paddle around in the cold mud, pick their grain out of the filth, and where there is nothing dry for them to scratch.

Good Tonics.

A good and reliable tonic for fowls that need a little stimulation is the Douglas mixture: One-half ounce sulphuric acid, six ounces copperas, four ounces water. Add a tablespoonful to every six quarts of drinking water. It is the proper thing to use when the fowls have a chill, slight cases of roup, or seem to be ailing without any special cause. Here is another good tonic for cold weather troubles: Two ounces licorice, two ounces ginger, one ounce cayenne pepper, one-half ounce anise seed, two ounces pimento, one ounce sulphate of iron. It should be given in powder form with the soft feed, using enough to flavor it perceptibly.

Advantages of Strong Land.

For a small poultry yard where the space is somewhat limited it is important to have soil which is somewhat sandy and gravelly. Such soil is much easier to keep dry and clean. Where there is plenty of space, so that the soil will not become foul, it does not matter if it contains considerable clay. Some of the most profitable poultry farms in the country are so clayey that the water stands in pools in many places. But there is no disease among the flocks because they are given nearly unlimited range. Strong lands support a much better growth of grass and stand drought better than poor soils, and hence are much more valuable for poultry pasturage. For a poultry farm to be conducted on a wide range system, or colony system, it would be better to buy strong land even a little moist as long as it produced the cultivated grasses, rather than a sandy farm which no amount of cultivation could make anything but barren and droughty.

Poultry Notes.

A hen will not thrive any better than a cow on poor pasturage.

Laying hens will do well until quite cold weather begins in movable coops on stubble land. But really sharp weather will stop them up short unless the coop is snug and warm.

For a small range the medium sized breeds of Plymouth Rocks and Wyandottes give better satisfaction than the more active breeds, which are likely to get restless in small coops and acquire bad habits.

No form of grit is more relished by fowls than pounded glass. They will not eat too much of it if given plenty of oyster shells also. The glass or crockery should be pounded in moderate sized pieces and the long splinters broken.

For doing their very best laying pens ought not to contain more than half a dozen pullets. The same individuals should be kept together all the time in order to avoid fighting and disturbance which follows the introduction of strangers. Any kind of discomfort and disquiet means loss of eggs.

In building a hen-house all the inside furniture should be made to be easily removed and taken apart. Roosts and nests and boxes that are nailed on catch a good deal of dirt around the fastenings, and become perfect breeding places for lice. But if they can be easily got at, and cleaned and kerosened, such trouble will be avoided.

It is mostly the late moulting fowls which are laying the eggs now, but these fowls will probably stop altogether at the first really cold snap and lay no more until spring. The only old hens which are likely to lay in winter are those which moult early and get over it quickly. The late moulters might as well be sold off when they stop laying.

The great egg producing country of the world is Belgium, which with about the area of the state of Maryland, produces 275,000,000 eggs per year. In the United States the great egg producing state is Ohio, with Iowa next. Missouri produces more chickens than any other state. The total value of the American poultry crop is much more than that of the wheat crop.

The laying of soft eggs, that is eggs covered with a membrane rather than a shell is easily ascribed to over-fatness, but some hens persist in the habit,

whether fat or lean even if well supplied with lime, and such fowls are doubtless effected with chronic disorder of the organs of reproduction. While these are all right for table poultry they are good for nothing else. If several hens in a flock lay soft eggs it is a sure sign of over feeding.

Hens can be crowded and get along somewhat, but there is no sense nor profit in it beyond a certain limit. Ten square feet to a fowl in a winter pen is the least allowance that pays. The roosting pen should have about three square feet of space to a fowl, and should be made as tight and warm as possible with double walls, bankings of earth or leaves, inside linings of paper, and an inner roof covering of straw packed tightly behind laths over the roosts. If hens are warm nights and dry times they will not mind winter weather much.

Cold Storage Eggs.

In a recent issue of "A Few Hens," "Uncle Mike" Boyer says: "Don't store away eggs because prices are low. It is dishonest; and the American Fancier expresses our own idea precisely when it replies: 'We can't see where the dishonesty comes in. On the contrary, we consider it good business policy to put fresh eggs in cold storage and hold them for higher prices. Properly kept, they are as good as the average consumer of eggs expects.' Mr. Boyer rejoins: 'These average consumers' must be city folks, for country folks know the appearance of fresh eggs too well to be imposed upon by stale ones.' 'If these eggs were sold as storage eggs,' he adds, 'we would certainly have no grounds to condemn the practice; but,' continues Mr. Boyer, 'this work of storing eggs is done by hucksters, who go among the farmers and buy all the eggs they can get, and then keep them several months before reaching the consumer.'"

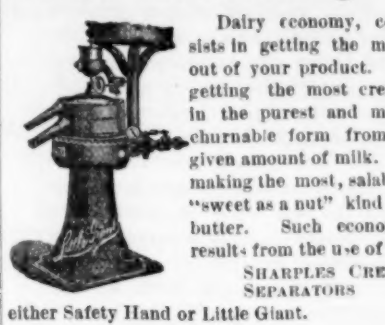
Now, this is not in accordance with the well-known accuracy of Mr. Boyer's poultry writings, which usually echo our own views, and we think he has failed to thoroughly investigate the subject, for if he was as far from home as he is from the facts, his friend would never see him again.

In the first place, cold storage eggs are not placed there by hucksters, as Mr. B. states, because hucksters have neither the means nor facilities for storing eggs. A proper cold storage plant is very expensive, and millions of dollars are invested in them throughout the country. The cold storage plants in Boston alone cost over a million and a half dollars, while Chicago, St. Louis, Buffalo and other large cities all have immense similar ones. The early part of July there were stored in Boston nearly 250,000 cases of eggs (30 dozen to the case, or 7,500,000 dozen), New York having about the same quantity. Boston had rather more than usual at that time, as the cut rates in freight during the early spring had a tendency to bring eggs to this point which are generally stored in the west, and shipped here later on. As regards ordinary or worthless eggs being placed in storage, this is far from being the fact. The greater proportion of eggs are stored during April and the early part of May, and stock intended for this purpose is carefully selected by the shipper and sent to the storage points in car lots ranging three hundred and fifty to five hundred cases per car. A 400-case car, for instance, ordinarily has about forty cases, or ten per cent. of culled and dirty eggs, the remainder being carefully selected and packed in good cases. Usually the cold storage stock does not commence to move until September or early part of October, but as the storage facilities and methods have improved from year to year, it has been found the past two seasons that while the bulk of so-called fresh eggs received from western points during July and August have averaged very poor in quality, the cold storage eggs have been much superior to them, having lost but little in flavor or freshness during the ten or twelve weeks of its being held.

There is no valid reason why eggs should not be placed in cold storage as well as poultry or butter, or any other farm product, and it certainly operates as a governor or regulator to the market, and perhaps especially so at times of heavy production, for otherwise if all stock was then obliged to be thrown on the market for consumers, a large portion of the product would have to be almost thrown away, and would hardly pay freight charges. The produce business, like all other lines, has greatly changed in the last few years, and former methods would not do now. For instance, there is stored in Boston today (August 8th), 21,159,

Storage eggs, to use Mr. Drevenstedt's language, are as good as the average consumer of eggs expects, or at least as he expects at that season of the year when strictly fresh eggs are scarce and high, and when but for the storage eggs, he and nine-tenths of the community, or the great masses of the people, would have to go without them entirely. If anybody in our large New England cities expects that when paying twenty cents per dozen he is buying strictly fresh eggs forty-eight hours old, and at a season of the year when fresh eggs are almost unobtainable at any price, and readily demand more than twice that sum, he must have a soft spot in his head, or his credulity is indeed childlike. True, there is a class among us who buy only the cheapest stuff, and their appreciation of an article is based wholly upon its extremely low price. The better class, or what might be called the "average" class, buy cold storage eggs knowing them to be such, or, at least knowing very well that they are not newly laid, and not expecting them to be newly laid any more than they expect the apples they buy in mid-winter to have been picked from the trees forty-eight hours previous. The fact is, few sane persons expect to buy any eggs but cold storage ones at a reasonable price when fresh ones are scarce and high; and as the best grade of cold storage eggs nowadays are practically good enough, and as most persons know all about them and know what they are buying, and prefer them to none at all, we fail to see the "dishonesty," or how "the customer is imposed upon." Nor do we see how the poultry raisers are referred to by Mr. Boyer as "endeavoring to establish a strictly fresh egg trade" have anything very serious to encounter by "bucking up against these sharks" who are selling a cold storage egg at a less price. Both have their goods, of different quality and at different prices, and in both cases customers possessed of common sense know what they are buying, and take their choice. We never knew, and never expect to know of strictly fresh eggs going begging for good prices when they were scarce and when they become more plenty the price naturally falls in exact proportion to the quantity produced

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943 pounds of butter. Had this amount been thrown on the market since first of June, we can easily imagine what the condition of trade in that article would have been. So with the 7,500,000 dozen eggs before referred to. Had not cold storage relieved the market, these eggs actually could not have been disposed of at any price, but a large portion of them would not have been worth their freight, and would have been thrown away. Thus does cold storage equalize the market, for on the other hand, were it not for cold storage, it would be utterly impossible to supply the wants of the egg market during October, November, December and January; and while cold storage gives the consumer an egg of good quality, much above that of an egg which has been held out of storage four or five weeks, the price is within the reach of all, and it really has but little effect upon the prices of strictly fresh stock, these holding up well until early in December, when a limited quantity of fresh eggs begin to arrive on the market from nearby points, which has the effect of lowering prices. During the month of November there is often a difference of twenty cents per dozen between the strictly fresh egg and cold storage stock; for while the latter at this time is perfectly satisfactory for all culinary purposes, still there are many consumers who insist on fresh stock for boiling eggs, etc., and are willing to pay the advance in price. We have a wide acquaintance and experience with egg dealers and shippers in all parts of the country, and have known of but very few instances where a storage egg was not sold as such. In fact, it has about thrown the lined eggs out of the market, consumers preferring storage stock to them, or indeed even to any so-called fresh eggs which are kept out of storage during the fall months.

The cities, then, with their immense supply of cold storage eggs, are, as already intimated, simply storehouses, or distributing points; and while the city dwellers use their proportion of these eggs, they are by no means the only consumers, a great proportion of the stock being sold to country dealers, who retail them to the very class of customers regarded by Mr. Boyer as being too wise to use them.

Storage eggs, to use Mr. Drevenstedt's language, are as good as the average consumer of eggs expects, or at least as he expects at that season of the year when strictly fresh eggs are scarce and high, and when but for the storage eggs, he and nine-tenths of the community, or the great masses of the people, would have to go without them entirely. If anybody in our large New England cities expects that when paying twenty cents per dozen he is buying strictly fresh eggs forty-eight hours old, and at a season of the year when fresh eggs are almost unobtainable at any price, and readily demand more than twice that sum, he must have a soft spot in his head, or his credulity is indeed childlike. True, there is a class among us who buy only the cheapest stuff, and their appreciation of an article is based wholly upon its extremely low price. The better class, or what might be called the "average" class, buy cold storage eggs knowing them to be such, or, at least knowing very well that they are not newly laid, and not expecting them to be newly laid any more than they expect the apples they buy in mid-winter to have been picked from the trees forty-eight hours previous. The fact is, few sane persons expect to buy any eggs but cold storage ones at a reasonable price when fresh ones are scarce and high; and as the best grade of cold storage eggs nowadays are practically good enough, and as most persons know all about them and know what they are buying, and prefer them to none at all, we fail to see the "dishonesty," or how "the customer is imposed upon." Nor do we see how the poultry raisers are referred to by Mr. Boyer as "endeavoring to establish a strictly fresh egg trade" have anything very serious to encounter by "bucking up against these sharks" who are selling a cold storage egg at a less price. Both have their goods, of different quality and at different prices, and in both cases customers possessed of common sense know what they are buying, and take their choice. We never knew, and never expect to know of strictly fresh eggs going begging for good prices when they were scarce and when they become more plenty the price naturally falls in exact proportion to the quantity produced

or offered in the market, and will continue to be governed in the future as in the past, by the inevitable law of demand and supply.—W. H. Radd, in Poultry Monthly.

Fall Pruning.

If one could watch his trees as a mother watches her infant it would be easy to subscribe to the no-pruning theory so earnestly advocated by some. For the branch coming out in the wrong place, and afterward requiring to be pruned away, could be removed at its very beginning with the finger and thumb. This, however, might still be called pruning; but it is only a resemblance—

"As the mist resembles the rain." In the usual way in which trees are grown, pruning, at times, becomes necessary, and the work should be done carefully and understandingly. The owner of the orchard himself is generally the best hand. The professional pruner is often no better than the tree agent, and to be trusted just as little.

In pruning there are two things to be avoided: (1) Leaving stubs two or three inches long, to be an eyesore for years; (2) making ragged cuts with horizontal surface or nearly so, which holds the moisture and induces decay. Every cut should be close to the tree or to branch, from which the rejected portion is removed, and the surface of every wound made in pruning should be as near the perpendicular as possible, to favor the speedy passing away of the rains, etc.

When the cut is made close to the limb the healing process which begins at once in a healthy tree soon covers the wound with new growth unless it is a large one. When a stub of several inches is left the same effort is made to heal the wound, without success.

Many persons do not know that wounds made by pruning and otherwise in September never decay, though they may be quite large. The surface may not be covered at all, indeed, if very large—but the exposed wood becomes hard as a bone and there is not the slightest danger of decay. The explanation of this is no doubt the condition of the wood, perfectly ripened, though the usual lack of rainfall at that season may have something to do with it.—National Stockman.

"Cheap" Hands the Dearest.

The farm hand of today, that is the cheap man, is a shiftless fellow, who works on the farm because there is the only place a man of his habits and ability can get a job. He cares little for his employer's interests, does nothing he can avoid, his sole object in life seeming to be to do as little as he can to hold his job and draw his pay, and he seems to enjoy being on the perilous brink. Nothing gives him more satisfaction than cheating the "old man" out of an hour's work.

He would count it almost a disgrace to take the lead and do an honest day's work without the eye of his employer on him. He never sees anything to do until it is pointed out to him. He has the sagacity of the Indian when it comes to telling the noon hour and quitting time. It is a point of honor with him to break a pitchfork handle. As helms too must suffer. Tools are misused and lost. The farmer does not dare trust him to look after the stock.

The money paid for such help is worse than lost, and sooner or later the farmer must be brought to recognize that fact. He will be forced to limit his business to a scale corresponding to his own working ability, or in the end find himself worse off for his folly.

The cause of all this lies with the farmer himself. Through a mistaken idea of economy he will not materially recognize the value of the good man over the poor one. There are other more lucrative positions for honest, trustworthy men, and they cannot afford to work as a farm laborer. A poor hand gets the same wages a good man is paid so there is little inducement held out to a man to put forth an effort.

"But we cannot afford to pay high wages," farmers say. That may be. We do not debate the point. We do maintain, however, that if it pays to hire at all it pays to add a few dollars paid to the cheap hand and secure a good man. Cheap labor is not cheap in the long run. For an illustration:

A few years ago two young men came to a farmer here to hire out. One set his price and the other underbid, and after half an hour's dickering, took service at \$3 less per month than the other young man, who stuck to his price, saying he felt he could earn that much. At the end of the first two weeks an account kept with the "cheap" hand would have stood something like this:

Two weeks' wages.....\$7.50
Pitchfork handle and axe helve.....1.25
Broken wheelbarrow.....3.00
Broken pump handle......75
Saw sharpened and hammer bought.....1.50
Total.....\$14.00

Besides the financial part of the story the team had been spoiled for the spring and summer work by allowing their shoulders to get sore, the milch cows

had become almost unmanageable and the feed for cattle, horses and hogs wasted. Did it pay? Let facts speak for themselves.

The remedy is, don't hire cheap labor. If it is necessary to economize by hiring a cheap man, dispose of your stock, keeping only what you can see to yourself. If your farm is more than you can manage rent a part of it, seed it down or let it rest, but don't try to make it with a cheap man.

There are other causes of failure than the hired man, but this is one of the greatest leaks. Labor should be purchased with the same forethought as to worth as are the other requisites. Any man who is making his life a burden by worrying himself with a "cheap" man, will do well to take an idle hour and think as to whether it pays. Should he be unable to solve the problem let him silence his economical scruples for once and get a good hand for next season, just as an experiment. He will never regret the price of the venture.—National Stockman.

Killing Beef on the Farm.

A farmer should have some meat besides salt pork. A nice fat beef neatly dressed will help out wonderfully and with the addition of a tripod to the tools usually found on a well regulated farm the killing and dressing may be done without driving the animal to a slaughter house.

Make a tripod as follows: Take three poles twelve feet long, 2x6 scantling will do, bore a hole through each on the six inch face six inches from one end and bolt them together with an eight bolt, having a clevis clamping the middle scantling and included in the bolting. In this clevis fasten the hook of one block of an ordinary block and tackle or if you have not a block and tackle fasten a pulley into the clevis in the tripod and have a roller fastened between two of the standards of the tripod near the ground and run the rope used for hoisting the carcass over these.

To kill the creature shoot with a 32-calibre rifle, placing the ball between the eyes two inches below a line even with the base of the horns. If a rifle is not at hand use a good shotgun at close range, not more than ten feet, closer would be better. If you have neither rifle nor shotgun use an ax, striking a sharp blow with the head on the spot indicated above. When the animal is felled, cut its throat lengthwise from a point nearly opposite where the jaws form a pivot to the brisket; then insert the knife full length and sever the jugular vein. Use a good knife six or seven inches long and have it steel sharpened.

As soon as the animal is dead skin out the head and remove it, then the forelegs to the knee, afterwards the hind legs to the gambrel joint. Turn the animal on its back and notice the line formed in the inside of the hind legs by the hair coming together or feathering out, follow this line with the knife in skinning. Do not run too near the tail; in a cow your line should come about six inches behind the udder. Skin down the sides, leaving the fore legs with the hide on. Cleave the pelvis bone and the brisket. Take the eveners of a set of double-trees and insert one clevis in each gambrel cord; if the clevis is not long enough use an S hook. Hook the tackle to the middle clevis of the eveners and raise the carcass so that the upper end is about as high as a man's head—then remove the entrails, using care to do a neat job. If any washing is needed do not wash the inside of the carcass—wipe it out with a damp cloth that has been wrung out of clear, cold water; an open fabric like gunny sacking is the best. After the entrails are removed skin down the back as far as convenient and saw down the backbone, then raise the carcass higher, skin down the back and saw down the backbone more, continue in this way till the two halves hang apart; then skin out the forelegs and your beef is hung for cooling. As soon as this is done salt your hide and do it up neatly leaving the trimming for the hide buyer to do unless you are an expert in putting hides in shape for market. When the beef is thoroughly cold, take down and cut up for fresh meat or to salt, as suits.—National Rural.

The veteran I. C. Libby, of Waterville, Me., asks: "What would be the result if today there were ten times as many sheep as now in the state?" This would not interfere with the dairy in interests in the least. There are enough pastures growing up to weeds and bushes to keep this number, and there has been enough hay sold from the farms of Maine the past winter, which has not netted \$5 per ton, to winter ten times as many. The farmers are not as prosperous as twenty-five years ago, which is wholly their own fault. No farmer is poor who has a flock of sheep, a good dairy herd of cows, ten good, growing steers, several good swine, a yard of 100 hens, with a well-tended, well-dressed farm. This stock can be kept on any 100-acre farm, and all the grain and hay can be raised to feed them.—Ex.

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MASSACHUSETTS PLOUGHMAN

BOSTON, NOVEMBER 19, 1898.

Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.

A good farm library will be a comfort these coming long winter evenings. Add a few books every year.

Even an incomplete and hastily made up farm account book will do something to stir the brain and save the purse when studied at the close of the year.

The value of tropical fruits grown in the United States is nearly \$20,000,000, according to the last census. Yet some people say that the annexation of tropical regions will not injure our agriculture.

Gild drudgery with enthusiasm. A busy head and a willing heart make routine work pleasant. Learn the why of what is done, and study up contrivances to do it faster and easier; this is one of the ways to get whatever blessing there is in drudgery.

A young man expecting to make a success of farming should lay plans long years ahead. Old farmers often explain how they had begun to plant trees or bring up the fertility of their farm with system and persistence in early years, old age would have found them in vastly better circumstances. A word to a wise young man is not always sufficient, but it ought to be.

The Grange is making a hard push to extend its rank in several states. The order has done much to help make life better worth living in many a town, and its representatives should receive all possible encouragement in their endeavors to start new branches. Almost any town can well support a grange if only the leaders and persons of most influence will lend a hand at the start.

Living in a city is pretty well if one has a fine mansion with money enough to carry it on, but even then it is an extremely crowded life for one who has natural tastes and instincts. A city man who bought an estate in the country remarked, "I had rather have a \$4,000 house on \$40,000 worth of land than a \$40,000 house on \$4,000 worth of land." Not even a rich man can buy enough land in a large city to give him any enjoyment.

Some kinds of American farm products are receiving quite a boom from the demand in Cuba. A large number of oxen and bullocks are being shipped, not only for meat supply but to furnish power for working the sugar plantations and machinery. Flour is also in considerable demand, and poultry and egg products are selling at high prices, the native stock having nearly all disappeared during the war. No doubt there are many good chances in different lines of agriculture in Cuba, and quite a rush of emigration may be expected as soon as the situation quiets down.

FARMER SLACK has been trying to sell out for several years, having put the place in the hands of real-estate agents, but it seems to be a hard place to sell. One man who came out to see the farm said he was afraid of malaria and mosquitoes from the big pool of drainage near the house. Another man thought it would cost a small fortune to put the buildings in decent shape, to say nothing of bringing the worn-out fields of mowing up to the standard. Still another objected because there were no good fruit trees on the place. For all that, the farm is naturally good, and if all the wastes were stopped, and some regard paid to appearances around the house and barn, the place might bring something near what it is worth.

The returns just completed for the census of 1896 show a small per cent of increase in the value of the farm lands in the state. Most of the value gained, however, is on the business properties of the towns and cities. No doubt in some of the smaller towns the value of farms has slightly increased during the decade. Tendency of development is to increase the importance of the towns which are centers of steam and electric railroads. Easy communication makes the small towns in the vicinity tributary to the larger center, very much after the manner of suburban districts around the big cities. Massachusetts is evidently to be more and more a state of cities, as it is already to a greater degree than the other states. But as suburban farmers are beginning to fully realize the growth of large towns helps the small towns, and the farmers who live in them in many ways. Dealers in farm real-estate assert that desirable farms within convenient distance of Boston are more difficult to obtain every year, and are held at gradually advancing prices.

How's This!

We offer One Hundred Dollars reward for any case of Catarrh that cannot be cured by Hall's Catarrh Cure. F. J. CHENEY & CO., Toledo, O. We, the undersigned, have known F. J. Cheney for the last 15 years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by him.

W. & T. TRACY, Wholesale Druggists, Toledo, O.

W. & T. TRACY, Wholesale Druggists, Toledo, O.

Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Testimonials sent free. Price 75c. per bottle. Sold by all Druggists.

CURRENT TOPICS.

It was reported that the Spanish war ship, the Maria Theresa, which was raised under the direction of Lieutenant Hobson and was on her way north, had gone to the bottom, after being abandoned during a severe storm. Later reports say that she was found stranded on Cat Island, one of the Bahamas, thirty miles from the spot where she was abandoned. She is said to be too badly damaged to make it worth while to save her.

On Thursday of last week, Wilmington, N. C., was the scene of a terrible race riot, the culmination of the passions engendered by the "white supremacy" campaign in that state. A mob of several hundred white men wrecked and burned the office of a negro newspaper, and assailed colored people which it encountered. In a series of melees that took place, eight or nine colored men were killed and three white men were wounded, one, it is believed, mortally. The regularly elected city government was compelled to resign, and one in sympathy with the mob was installed, after which it was said that tranquility reigned in Wilmington.

The Women's Christian Temperance Union, in convention at St. Paul, voted by a large majority, to abandon the Woman's Temple project which has proved to be a greater financial burden than they were able to carry and threatened to interfere seriously with the work and usefulness of the organization. Five hours of animated, vigorous, bitter and personal debating was necessary before the vote was reached. The opposition to this action declared it was an act of repudiation of a moral obligation and fought every inch of ground but most of the leaders were against them who carried their point. Mrs. Stevens of Maine has been elected president of the organization.

After a recess of several weeks the Anglo-American joint high commission, which is attempting to settle all vexed questions between the United States, England and Canada, began its sessions again last week this time at Washington. The preliminary meeting was for the purpose of adopting the general plan of business to be followed. The principal topics are fixed by a protocol, and comprise: Bearing Sea seal fisheries, Atlantic and Pacific coast fisheries, Alaska-Canadian boundary, transportation of merchandise in bond across the border, alien labor laws of the United States and Canada, mining rights in the Klondike and other points, reciprocity and tariff arrangements, naval vessels on the great lakes, new marking of the frontier line by land and water, extradition of criminals and mutual wrecking and salvage arrangements. One of the commissioners stated that until all the subjects had been disposed of, each one remained open.

At this writing, nothing definite has been given out as to Spain's decision in the peace treaty matter. Rumors as to Spain's probable action have been many, and there have been indications that some of the European nations might interfere, the recent visit of the emperor of Germany to Spain giving color to this report. The French are especially interested in the terms of the peace treaty as most of the Spanish bonds are held by them and unless the Americans are liberal, the bonds will be worth but little. Spain is reported as standing firm in her refusal to relinquish the sovereignty of the Philippines, but it is believed that she must ultimately agree to the terms of the United States, and the longer she delays in her acquiescence, the less favorable terms will she obtain. A report was set afloat that a syndicate was proposing to purchase the Philippines, paying therefor an immense sum. An investigation proves that this syndicate is made up of irresponsible persons and it is believed that the announcement was made for the purpose of giving Spain an opportunity to obtain from the United States a much larger amount than would otherwise be the case. The American peace commissioners have been instructed, it is said, to bring the negotiations to a close in a short time and to give the Spanish to understand that a decision must be reached quickly, without unnecessarily prolonging the debate.

When the terms of the peace treaty are at last settled, it is said that no extra session of congress will be called in March, 1899, as has been thought might be possible. At the coming short session the President expects that all the legislation will be gotten out of the way which is immediately necessary, including the appropriation for carrying the Government through the next fiscal year, and the only thing of importance which now seems likely to be thrown over is the treaty of peace with Spain, which will have to be ratified by the senate before becoming operative. In case that is ready by March next, an extra session of the senate alone may be called to give it the finishing touches, but the presence of the house, as far as can be foreseen today, will not be required.

The reasons which impel the President to this view may be summed up in the single statement that he does not care to have congress on his hands at the juncture which will then have been reached. The only thing in connection with our new colonial dependencies which would call for general legislation would be the establishment of systems of civil government there, and the President feels that this is a matter in which there is danger from too great haste. He would rather feel his way first by keeping the military authority uppermost, but under it building up a modified civil system, little by little.

so that, by the time he turns the matter over to congress, he will be able to recommend the legislation most desired, and to draw upon actually existing conditions for illustrations with which to enforce his arguments. In other words, if congress finds a satisfactory system of government already in operation in the newly acquired territory, it will be less likely to rush into foolish experiments.

At the lord mayor's banquet, in London, recently, Lord Salisbury delivered a speech which has created a profound sensation in Europe less by what he said than by what he implied. He did not make the announcement of a formal protectorate over Egypt that had been expected, but declared that the battle of Omdurman had worked a great advantage for England in Africa. He declared that the closing of the Fashoda incident had done much towards clearing the situation with regard to France, but intimated that it did not wholly clear it. Of the United States, he remarked in substance that its accession to Asiatic interests and relations, with consequent probable mixture in European diplomacy did not in his judgment make for peace. At the same time he expressed warm sympathy for the United States, and expressed the belief that recent events would prevent it from ever becoming hostile to the interests of Great Britain.

The court of cassation in Paris has decided that Dreyfus may be informed of the fact that his case is being brought up and has directed him to prepare his defence. Letters previously received from him have shown him to be broken down and hopeless, even the one occupation of writing letters and statements having lost all attraction for him, and he was reported as having but little longer to live. This latest news, however, will give him new courage and the world may yet see Dreyfus free and cleared from the charge brought against him; an end for which his faithful wife and friends have long worked.

Washington News.

Interest continues in the proposition of the new Forester of the Agricultural Department to add private timber holders in the management of their forests, to the end that forest perpetuation shall ensue, rather than the total destruction of forest lands, as has been the case in the northwest to the extent of hundreds of millions of acres. Mr. Pinchot has now applications from individuals desiring his aid covering over a million acres of timber land. Mr. Pinchot states that it is not yet possible to practise complete and advanced forestry, as understood in Europe, which contemplates the planting of forest trees and the removing of useless timber; all that can be accomplished at present is a modification of the methods of the lumberman to the extent of omitting to cut all trees so that enough of a species shall be left standing for seed purposes. A description of forest preservation in Bohemia, just received at the State Department from consul Mahin, bears on this subject and shows the possibilities of scientific forestry. Bohemia, says consul Mahin, is one of the most populous countries on the globe. Its climate is relatively cool, with rather severe winters. Therefore much fuel is used and it is taken largely from the forests which cover the mountain sides. Yet, after the many centuries during which these forests have furnished fuel and building material for a dense population, they retain nearly their primeval area. This is due to the forethought of the government in ordaining that as trees were cut down others should be planted to fill the vacancies. Vast stretches of dense forests cover the mountain slopes of this district. Trees are constantly being cut, but wherever a clearing is made, small trees are planted the next spring. What at a distance may appear to be a bare spot in the forest, is seen, on near view to be covered with little trees, set out in symmetrical rows and varying in height according to the length of time since they were planted. These new trees are raised from seed in small enclosures scattered among the mountains and are thence transplanted.

AMERICAN IMPLEMENTS ABROAD. Consul Fleming to Edinburgh reports the extensive and favored use in Scotland of American tools and implements. Asked by him whether or not they handled American wares, one of the members of an Edinburgh wholesale firm dealing extensively in implements, answered: "Yes, largely. Come into our warehouses and see for yourself. These are American axes," he said, "the best and cheapest in the world." In every part of the great establishment most of the articles were American made, including bayonets, law-mowers, saws, files, wheels, knives, rams, spades, shovels, rakes, hammers, hatchets, and all classes of implements and carpenter's tools. American tools are preferred to either English or German. They are tempered better and are more serviceable. German tools are somewhat cheaper, but they are softer and do not stand so well.

CORN IN GERMANY. The American commercial agent at Weimer, Germany, Mr. Thomas E. Moore, thinks that there is a field there of great possibilities in the line of corn introduction as a human food. At present he states it is practically unknown for this purpose, being fed to cattle, but he believes it would take comparatively little effort to insure its use among the people to as great an extent as it is used in the United States for bread. Corn is quite largely imported into Germany for cattle feeding, and practically the only source of corn supply for Germany is the United States. Bremen and Hamburg are the great corn-importing centers of the Empire, and in 1897, the arrivals of corn at the latter city were 618,861 tons, valued at \$9,096,000; and at Bremen 342,954 tons, valued at \$3,808,000. The increase over the figures for 1896 was almost 50 per cent, due, however, to some extent to the damaged German oat crop.

CAN WE INVADE AUSTRIA. The State Department has received an interesting communication from Consul Mahin, at Reichenberg, Austria. He says: "If the price of American butter in Europe is no higher than European butter, the former should gradually win a large sale as its superiority becomes known. The first day after being made European butter may seem equal to the American product, but generally by the second or third day it will have an old, strong taste and smell. The difficulty may be due to the practice of keeping cows in barns all the year, instead of turning them loose in pastures as is done in the United States. Table butter sells here at about thirty cents a pound, cooking butter—which usually contains a small mixture of lard to make it keep better—sells at a few cents less. Prices are about the same the year around. The Austrian duty on butter is less than two cents per pound, and the freight per pound from America would probably be no more than the duty. If this be true the good butter, which sells at an average price of twenty cents a pound, or less in the agricultural districts of America could undersell Austrian butter here."

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AN EMINENT TRUCK FARMER. The Massachusetts PLOUGHMAN regrets exceedingly to learn that Capt. O. A. Browne, who for many years has been an honored and exceedingly useful member of the Virginia State Board of Agriculture, died last month at the Johns Hopkins Hospital, Baltimore, where he had gone for surgical treatment. His original, practical method of conducting one of the largest truck farms in the United States, attracted the attention of truckers from Maine to Florida. His advice, founded on a most successful experience, has benefited hundreds of truckers, many of whom have acquired comfortable fortunes, by duplicating Captain Browne's methods of conducting the celebrated Hollywood Truck Farm.

California seems to be working up a profitable butter trade with the Japs. Consul-General Govey, at Yokohama, reports to the Bureau of Foreign Commerce that the imports of butter into the empire for 1897 amounted to 182,484 pounds, worth \$37,500. Of this the United States furnished 73,000 pounds, most of it coming from California. The average price is about thirty-five cents per pound. The Department of Agriculture now has an agent in Japan, getting some practical information concerning this trade. Between March and October it is very difficult to get sweet butter there; it becomes more or less rancid unless specially prepared for export.

CHEMISTS IN CONVENTION. The fifteenth annual convention of the Association of Official Agricultural Chemists was held in Washington last week (commencing Nov. 11). The results were rather technical for ordinary non-chemical mortals to understand thoroughly, but they dealt largely with experiments which have been made during the year with various kinds of fertilizers and fertilizer constituents; also with food adulteration. The members of the association are men of high standing; Dr. H. W. Wiley is its secretary, and he reports that the association is doing excellent work, which when completed, can in each case be reduced to practical benefit to the farmer and fertilizer user, as well as the consumer.

TEA AT A DOLLAR A POUND. While it is not probable that labor conditions will ever be such in this country as to enable us to compete with China in the production of cheap tea, there certainly is a field for the high grade article. It is well known that we can grow the tea plant to perfection in the southern states; it is also a recognized fact that the best teas that we can import from China are not the best teas there produced, which are kept for home consumption. Several tea plantations have been started in the south for the production of high grade tea, and it is stated that one located at Summerville, South Carolina, is proving a success. The cost of raising the tea is thirty cents per pound, with a prospect of still further reduction, while it is said that none of the teas has brought less than \$1. Great care is taken in the curing and rolling with the idea of placing on the market nothing but tea of the very finest grade and flavor.

ABOUT ALASKA. It is probable that but few people have any idea of the agricultural possibilities of Alaska. While most everybody knows that the coast country has a climate greatly modified by the influence of the warm Japan current which sweeps past, affecting it very much as does the Gulf current in Ireland and England, it will doubtless be a surprise to many to know that the winters are less rigorous than those of Virginia, while the summers are much cooler. Last spring the Agricultural Department sent out Prof. C. C. Georgeson to make some experiments in the territory and he has just returned and reports great possibilities for the country in the way of barley, oat and flax growing; also that most vegetables yield vigorously. He had several small plots, aggregating about two acres under culti-

vation and has brought back specimens of barley, oats, potatoes, clover potatoes and other plants grown by himself. The oats and barley are exceptionally fine; would be a credit, he says, to any country. The oats sample show very large full seed and are far heavier than average oats. The flax grown was very fine; from a fiber standpoint, comparing favorably with the best State of Washington flax. Professor Georgeson surveyed out three sections of ground for experiment stations and it is expected work will be carried on there next year. The interior of the country, back from the seacoast is very cold, the thermometer reaching as low as 40 and 60 degrees below zero.

ANOTHER AMERICAN FARM INDUSTRY. A new farm industry which has sprung into existence within the past two years is chickery growing. Two years ago this country imported chickery root and prepared chickery to the amount of about 15 million pounds annually, and no chickery was grown here. Now the importation has dropped down to practically nothing and the farmers of Michigan, Wisconsin, Minnesota and some other sections are furnishing the entire supply. More than this, owing to the short crop in Belgium, where most of the foreign root is grown and whence we procured all our importations, the price of chickery is now higher than American chickery is in New York by \$5 a ton, so that had we a surplus we could export it with profit. It is believed by the officials of the Agricultural Department, who have given the subject considerable attention during the past two years, that with further improvements in cultivation among the farmers, and still better methods of manufacture, this country can compete with Belgium year in and year out.

Secretary Wilson has sent large numbers of Bermuda lily bulbs into several of the southern states, with a view to supplanting the Bermuda Easter trade, which annually sends out of the country a large amount of money. Mr. Wilson expresses the belief that there are sections of the country, if they can be found, as well adapted to the culture of this flower, as is Bermuda.

GUY E. MITCHELL.

WINTER MEETINGS.

Massachusetts State Board.

The program of the public winter meeting of the Massachusetts State Board of Agriculture, to be held in Amherst, Dec. 7, 8 and 9, is particularly interesting, especially to those living in the Connecticut Valley, many of the subjects being chosen with reference to their needs and desires. The program, which is given in full below, should attract a large attendance.

To introduce the lecturers it may be said that—Dr. Jenkins has been connected with the Connecticut Experiment Station since 1876, and since 1883 has been Vice-Director. His experiments on many problems of vital interest to agriculturists have been of the greatest value to farmers. He has made the tobacco question a leading one for several years past. He is a fine speaker.

Dr. Jordan graduated at the Maine Agricultural College in 1875 and has since been continuously occupied in study, teaching and experimenting in agricultural colleges and experiment stations. He is at present Director of the New York State Experiment Station.

Dr. G. Stanley Hall is well-known as one of the foremost educators in this country and one of the best of American lecturers. His subject is one in which he is greatly interested. This lecture is arranged to interest the people of the village of Amherst, the faculty and students of the two colleges, and teachers in public schools, as well as agriculturists.

J. H. Hale needs no introduction. His unprecedented success in the business of raising and marketing peaches and other fruits is well known. He has also observed the methods of successful agriculturists in nearly every state in the union and will give an address worth hearing.

S. D. Willard is a life-long fruit grower and nurseryman. He is one of the most interesting and instructive institute speakers of New York. He will talk from experience.

Dr. J. L. Hills graduated from the Massachusetts Agricultural College in 1881. Since then he has been continually engaged in experiment station work in Massachusetts, New Jersey and Vermont and has made a special study of the dairy question. He is good authority and an interesting lecturer.

Prof. Phelps is also a graduate of our agricultural college and has made agricultural investigations and the dissemination of information his life work. His work at the Connecticut Experiment Station has been most highly appreciated by the farmers. He has made a special study of the feeding material that New England farmers can economically produce and the New England dairymen profitably feed. He speaks from his own experiments and experience.

The college farm and horticultural departments will make an interesting exhibit of products at the meeting and all departments will exhibit material that will illustrate the lectures. The college and experiment station buildings will be open for inspection of those attending the meeting each morning before the hour of opening the meeting. All will be welcome at the reception at the Agricultural College Chapel on Wednesday evening.

The Amherst House will provide accommodations for all attending the meeting at the uniform rate of \$2 per day.

Secretaries of granges and farmers' clubs and all others interested are requested to circulate information of the meeting. If they will personally call the attention of their neighbors and friends

The Hatch

EXPERIMENT STATION at Amherst, Mass., in reporting the results of its experiments with Bowker's Animal Meal as compared with green cut bone, says:

"The advantage in this trial is then clearly with the ANIMAL MEAL as a food for egg production. It has given more eggs of greater average weight, and at considerably less cost, and is a more convenient food to use, as well as safer."

BOWKER'S ANIMAL MEAL is a clean, wholesome combination of fresh, sweet meat and bone, thoroughly cooked, hence easily digested. It makes hens lay. It makes chicks grow. If you can't find it at your dealer's, and will pay the expressman, we will send you 5 lbs. for a quarter.

The Bowker Company,
43 Chatham Street, Boston, Mass.

to this program and meeting, they will confer a favor upon the Board, and will also, we are convinced, do a service to the cause of agriculture.

PROGRAMME.

TUESDAY, DECEMBER 6.

10 A. M.—Prayer by Rev. Dr. Chas. S. Walker of the Agricultural College.

Opening Address by Henry H. Goodell, L.L.D., President Massachusetts Agricultural College.

11 A. M.—Lecture: "What the Experiment Stations have learned about Raising and Curing Tobacco," by Dr. E. H. Jenkins, Vice-Director Connecticut Agricultural Experiment Station.

2 P. M.—Lecture: "The Mission of the Agricultural College," by Dr. W. H. Jordan, Director New York Agricultural Experiment Station.

7:30 P. M.—Lecture: "The Love and Study of Nature (a part of Education)," by Dr. G. Stanley Hall, President Clark University, Worcester.

WEDNESDAY, DECEMBER 7.

10:30 A. M.—Lecture: "The Business Side of Agriculture," by J. H. Hale, South Glastonbury, Conn.

2 P. M.—Lecture: "The place that Fruit Growing should hold in New England Agriculture," by S. D. Willard, Geneva, N. Y.

EVENING 7:30-9:30—Reception to the Board of Agriculture, and others attending the meeting, at the Massachusetts Agricultural College Chapel.

THURSDAY, DECEMBER 8.

10:30 A. M.—Lecture: "How can New England Compete with the West in Dairying?" by Dr. J. L. Hills, Director Vermont Agricultural Experiment Station.

1:30 P. M.—Lecture: "Grasses and Forage Crops," by Prof. C. S. Phelps, Storrs Agricultural College, Storrs, Conn.

All lectures will be followed by discussions, in which all persons present are invited to engage.

Maine State Dairy Conference.

The farmers of New England will not lack for opportunities for acquiring knowledge and new impetus in their chosen profession, judging by the programs of the various meetings open to them this month. The Maine State Dairy Conference will be held in Portland, Me., on December 7 and 8, with the program given below. There will be large displays of butter, cheese and poultry, for which liberal premiums are to be offered.

WEDNESDAY, DEC. 7.

9:30 A. M.—Dairy machinery in operation.

10 A. M.—Introductory exercises.

10:30 A. M.—"Our Dairy Work for 1898," by G. M. Govey, Director of Animal Industry at University of Maine.

11:30 A. M.—"The Dairy Outlook for 1899," by Secretary B. W. McKee.

1:30 P. M.—"Economic Dairy Foods," by Prof. J. L. Hills, Director of the Vermont Agricultural Experiment Station, Burlington, Vt. Discussion, opened by Mr. B. F. Briggs of Auburn, Member of the Board from Androscoggin County.

7:30 P. M.—"The Value of Feeding Standards to the Practical Farmer," by Prof. Chas. D. Woods, Director of the Maine Experiment Station, Orono. Discussion, opened by Mr. I. O. Straw of Newfield, Member of the Board from York County.

THURSDAY, DEC. 8.

9 A. M.—Dairy machinery in operation.

10:30 A. M.—"The Breeding, Selection and Handling of the Modern Dairy Cow to Secure Most Profit," by Valancey E. Fuller of New York. Secretary of the American Jersey Cattle Club.

1:30 P. M.—"Sanitary Aspects of Dairying," by Mr. Theobald Smith of the Harvard Medical School.

7:30 P. M.—Address by Dr. A. W. Harris, President of University of Maine, followed by Five Minute Talks by Farmers and Creamery Men.

2 P. M. Lecture—Education in Agriculture, and the Relation of our Public Schools thereto, Hon. George T. Powell, Ghent, N. Y.

8 P. M. Lecture—The Growing and Curing of Wrapper Leaf Tobacco in New England and elsewhere. Illustrated by Stereopticon, Dr. E. H. Jenkins, New Haven.

WEDNESDAY, DECEMBER 14.

10 A. M. Lecture—Meadows and Permanent Pastures, Col. James Wood, Mt. Kisco, N. Y.

3 P. M. Lecture—Disposal of Garbage and Sewage in Town and Country, Col. George E. Waring, Jr., New York.

NOTE—While this program was in the hands of the printer, news was received of the death of Colonel Waring in New York, October 29. The hour for the lecture will be devoted to a memorial tribute to Colonel Waring, by a number of his friends.

7:30 P. M.—Common Sense Farming, Mr. R. S. Hinman, Oxford.

8 P. M. Lecture—The Citizen's Duty to the Public Schools, Mrs. Alice Freeman Palmer, Cambridge, Mass.

THURSDAY, DECEMBER 15.

10 A. M. Lecture—Fruit Culture, Orchards and Small Farms, Hon. George T. Powell, Ghent, N. Y.

2:00 P. M. Lecture—The Past, Present and Future of Connecticut Fruit Culture. Mr. J. H. Hale, South Glastonbury.

7:30 P. M. Lecture—The Value of Birds to the Commonwealth. Illustrated by specimens and by stereopticon. Mr. Frank M. Chapman, American Museum Natural History, New York.

Thousands of people in all parts of the country have abandoned smoke-houses and now use Liquid Extract of Smoke for smoking hams, beef, sausages and all meats that were formerly smoked by fire. The Extract of Smoke is made by E. Krauser & Brother, of Milton, Pa. It is a pure, clean extract of hickory wood, containing exactly the same properties of the wood that cure the meat by smoking, only being in a liquid form. It is applied in a few moments instead of requiring days. Liquid Extract of Smoke has been found to keep meats sweeter and finer flavored than the old way, and it also keeps them entirely free from insects. Circulars will be sent free.

MECHANICS' FAIR 1898
By the "Old Mechanics' Association."
Boston, Oct. 10 to Dec. 3, 1898.

MORE THAN SIX ACRES OF EXHIBITS—Emersonian, Stairing, Fascinating—Showing the Progress and Triumph of THE MECHANIC, ELECTRIC and ENGINEERING ARTS!
The First Exhibition in the World's History with Electricity as the Exclusive Motive Power.
XENODOCHE cordially extended to all visitors. Musical Attractions of a high order of excellence.

Wireless Telegraphy, Exploding Submarine Mines and Blowing Up Miniature Warships.
Moore's "Light of the Future."
The Diesel Motor.
The Wonderful X-Ray.
Free Vaudeville Theatre, J. F. KEITH, Proprietor.
Japanese Tea Garden.

"By far the best Exhibition ever given in Boston."—Boston Herald.
FACTORIES AND WORKSHOPS IN OPERATION.
Horseless Carriages, Steam, Gasoline and Electric.
25c. Admits to All.
10 A. M. to 10 P. M. CAFE Always Open.

Boys' Reefers
A good warm Chinchilla Reefer, deep Sailor Collar, Cut Double Breasted, Button to neck. Ages 3 to 8 years.
\$2.00 & \$2.50
Oak Hall Clothing Co.
95 to 105 Washington, BOSTON.

Hood's Pills
Are gaining favor rapidly. Business men and travelers carry them in their pockets, ladies carry them in their purses, housekeepers keep them in their medicine closets, friends recommend them to friends. 25c.

MARKETS.

BOSTON LIVE STOCK MARKET.

Cattle less active; low grades easier—Sheep about steady—Fat hogs 1-2¢ lower—Less activity in Veal Calves—Steady prices for Milch cows—Horse market unchanged.

Reported for Mass. Ploughman.

Week ending Nov. 16, 1898.

Amount of Stock at Market.

Cattle	Sheep	Hogs	Veal
3,230	9,520	145,284	1,352
2,931	6,332	102,281	1,302
2,931	6,332	102,281	1,302
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2,931	6,332	102,281	1,302

CATTLE AND SHEEP FROM SEVERAL STATES	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

CATTLE AND SHEEP BY RAILROADS, ETC.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

Values on Northern Cattle, etc.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

Values on Southern Cattle, etc.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

ARRIVALS AT THE DIFFERENT YARDS.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

General Live Stock Notes.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

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Total	3,230

Cattle	Sheep
Massachusetts	314
New York	1,000
Other States	320
Total	3,230

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Union Yards, Watertown.

Tuesday, Nov. 15, 1898.

It is evident that J. A. Hathaway has made a contract with the Warren Line steamers to export cattle during the winter months as he has been handling especially nice cattle for home and export trade. We note Western cattle are selling unchanged prices, \$4.70 to \$5.40 per lb. The demand for light country cattle is as good as ever in previous weeks but we anticipate a better city demand for such kind of beef for the next few weeks.

Reported for Mass. Ploughman.

Week ending Nov. 16, 1898.

Amount of Stock at Market.

Cattle	Sheep	Hogs	Veal
3,230	9,520	145,284	1,352
2,931	6,332	102,281	1,302
2,931	6,332	102,281	1,302
2,931	6,332	102,281	1,302
2,931	6,332	102,281	1,302

CATTLE AND SHEEP FROM SEVERAL STATES	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

Values on Northern Cattle, etc.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

Values on Southern Cattle, etc.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

ARRIVALS AT THE DIFFERENT YARDS.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

General Live Stock Notes.	Cattle	Sheep
Massachusetts	314	2,320
New York	1,000	1,000
Other States	320	6,200
Total	3,230	9,520

Cattle	Sheep
Massachusetts	314
New York	1,000
Other States	320
Total	3,230

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Fowls & Poultry.

Tuesday, Nov. 15, 1898.

There is only a moderate supply of strictly fancy fresh butter on the market, but full more than enough for the demand, and 21¢ per lb. for the best assortment is still about as high a quotation as the condition of the trade will warrant. There is nothing doing in fresh fruits or second-hand goods. Prices are steady. Fine June golds sell fairly.

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Cattle	Sheep
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Total	3,230

Dried Apples.

Tuesday, Nov. 15, 1898.

Receipts are liberal and demand only moderate for choice marrow peas. Most sales are held at \$1.50. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white peas steady at \$1.00. Extra green peas steady at \$1.00. Extra red peas steady at \$1.00. Extra black peas steady at \$1.00. Extra brown peas steady at \$1.00. Extra grey peas steady at \$1.00. Extra pink peas steady at \$1.00. Extra purple peas steady at \$1.00. Extra orange peas steady at \$1.00. Extra yellow peas steady at \$1.00. Extra white

THE HOUSEHOLD.

HIS SIXTH BIRTHDAY.

He has given up his cradle and his little worsted ball.
He has hidden all his dolls behind the door;
He must have a rocking-chair
And a hardwood top, of course,
For he isn't mamma's baby any more.

He has cut off all his curls, they are only fit for girls.
And has left them in a heap upon the floor;
For he's six years old today,
And he's glad to hear them say
That he isn't mamma's baby any more.

He has pockets in his trousers, like his older brother Jim,
Though he thinks he should have had them long before.
Has new shoes laced to the top,
'Tis a puzzle where they stop;
And he isn't mamma's baby any more.

He has heard his parents sigh, and has greatly wondered why
They are sorry when he has such bliss in store;
For he's now their darling boy,
And will be their pride and joy,
Though he cannot be their baby any more.
—Georgina E. Billings.

THE RAINY-DAY POSTMAN.

"It's a splendid rainy-day plan!" shouted Maurice. The children were having a conference about what they should do that afternoon.

Mildred had proposed the plan, and she smiled modestly. "I know papa would like it," she said. "He's dreadful lonesome while mamma is away. We are too, but then we go to bed early, and poor papa has to sit up all alone."

"I do hope grandma will soon be well, and then mamma can come home right away," exclaimed Edith. She was six years old, but still "the baby," and she missed mamma dreadfully.

Nurse let them all have pencils or pens and writing paper, and they passed a busy afternoon getting ready to surprise poor lonely papa, when he should come home, wet and tired.

At last his key was heard in the latch and the children flew to meet him. Maurice took his dripping umbrella, Mildred had his slippers well warmed, and Edie pushed his favorite chair up to the open fire.

"Ah, this is nice," said papa, as they waited on him. "It is a good, good home to come to, my dears."

Soon the supper bell rang, and they all went to the dining-room.

"Why, what's this?" cried papa, as he pulled his chair out. On its seat lay an envelope addressed to him. It was marked, in the lower left-hand corner: "By the rainy-day postman."

They all sat down at the table, the children red and smiling.

"This must be a new postman, my dears," remarked papa. "Does he look very different from our other postman? He must be a kind fellow to be willing to be the one who tramps out on the rainy days delivering letters."

At this Maurice almost choked over his glass of water.

"He is, papa," said Mildred. "I've seen him; he's quite a little fellow for a postman." She looked at Maurice smiling.

As papa lifted his plate he almost dropped it, for there lay another letter marked, "By the rainy-day postman."

"Well, children," he said, looking around, "this rainy-day postman is more than kind; he is really generous. It is very pleasant to get letters on a rainy night, and I thank him."

"Isn't it a him, it's a her, this time," burst in Maurice. But papa didn't take any notice. He went on opening his letters. The first one read like this:

My dear Papa:—It's awful stormy and I thought you'd like to get a letter from me to-night, when you come home tired and wet. I spilled some ink on the library table doing this, but most of it went on the blotter. I hope you will not care. Very truly yours,
MAURICE.

P. S.—Mildred thought of this plan.

The other note read as follows:

My darling Papa:—We thought it is so lonely without mamma that you would enjoy to hear from us by letter. We have tried to be good to-day. Yesterday we didn't, very hard, but we are sorry.

Your loving little daughter,
MILDRED.

In a moment some one passed the bread to papa. As he lifted the top slice off, a square white something lay underneath—a tiny envelope addressed like the others.

"This curious rainy-day postman must certainly be rewarded," said papa, as he lifted the envelope. In it was a little sheet of paper with these words:

Dear, dear Papa:—I don't want you to be lonely, so I send you my love.

Your little girl,
EDIE.

"Now, children," said papa, "after supper you must all be on the lookout, and if you see anything of that rainy-day postman, just invite him in to have some nuts and candy with us. He's just the dearest fellow I ever heard of, to be thinking all the afternoon about a lonely papa who hasn't any dear, good mamma to sit with this evening. I expected to feel more lonely than usual, too, for I didn't get my daily letter from her to-day."

How the children chattered then, telling about their plan, and their delight in papa's surprise! It was a very pleasant supper.

Just as they were going through the hall to the library, the bell rang loudly. Papa stepped to open it, and there, with streaming waterproof, but the happiest face in the world, stood mamma.

"This is the letter I missed to-day," exclaimed papa, as he took her in his arms.

"Yes, I thought I'd bring myself instead of writing. It's very pleasant to surprise one's family and see how they are behaving when they think one is away," laughed mamma, stopping at every other word to hug the children.

"And grandma is so much better, I couldn't stay away any longer."

"Well, mamma, you are just in time for a little party," said papa, as he took off her wraps and led her into the dining room, Mildred, Edith and Maurice

following. "We plan this evening to entertain the rainy-day postman. You are not acquainted with him yet, but I'll introduce you, and you will surely like him when I tell you how good he is to lonely people on rainy evenings!"

It was a gala night to the family. Papa had a box of candy and his pockets full of nuts, and mamma had little gifts for them all. The children sat up an hour later than usual, as a special treat, and their eyes shone and their hearts swelled to hear what papa and mamma had to say of the kindness and cleverness of the rainy-day postman.—
Outlook.

How Uncle Dave Made an Encyclopedia.

"I do wish," said Rob to Uncle Dave, "that we had an encyclopedia in the house! I so often want information on different subjects, and it is not always convenient to go to the Public Library."

"Well, why don't you make one?" said Uncle Dave.

"Make one!" cried Rob; "you are joking, surely."

"Not at all," said his uncle, rising, and going toward his desk. "Have you never seen mine?"

"No," said Rob, with eyes full of wonder, and following him across the room.

Uncle Dave opened a drawer, and, taking out a good-sized book, laid it on the desk and invited Rob to examine it.

He opened it to the front, and found a neat index, each letter of the alphabet having a full page. Some of these were well filled with numerous subjects beginning with the same letter, while others had only a few. Under the letter A he found the words "Ants," "Alphabet," "Alligators," "Apples," etc.; under B, "Beetles," "Boys," "Banjo," "Bears," etc. He turned to the page devoted to ants, and found scraps pasted in on the following subjects: "The Strength of the Ant," "An Ant Fifteen Years Old," "Work of White Ants," "Did the Ant Talk?"

Intensely interested, he turned to the S, and found the following subjects treated: "Ships," "Stags," "Swallow," "Seals," "Spinning-wheels," "Spiders," "Sponges," etc. He turned to the page which referred to snails, and became interested in knowing that snails possess quite an affection for each other, and that large farms in Switzerland are devoted to the raising of these small beings. He laughed outright when he read that, if a snail lost his head, and was put in a cool place, a new one would soon be grown.

"Why, Uncle Dave, I think this is just splendid! Do you think I could ever make one like it?"

"There is no reason why you should not, my boy. All you need do is to scan carefully every paper that passes through your hands. Much valuable information on every subject is too often consigned to the waste basket, or used to kindle the kitchen fire."—Sunday School Times.

GEMS.

WHAT WOULDST THOU BE?
A blessing to each one surrounding me,
A chance of dew to the weary heart.
A sunbeam of joy, bidding sorrow depart,
To the storm-tossed vessel a beacon light,
A nightingale song in the darkest night,
A beckoning hand to a far off goal,
An angel of love to each friendless soul;
Such would I be.
Oh that such happiness were for me!
—F. R. Havergal.

A man must not choose his neighbor; he must take the neighbor that God sends him. In him, whoever he be, lies hidden or revealed a beautiful brother. The neighbor is just the man who is next to you at the moment. This love of neighbor is the only door out of the dungeon of self.—George Macdonald.

Possessing little maketh no man poor; His poverty is in desiring more.

It is a conquest when we can lift ourselves above the annoyance of circumstances over which we have no control; but it is a greater victory when we can make those circumstances our helpers, when we can appreciate the good there is in them.—Lucy Larcom.

Do not dare to live without some clear intention toward which your living shall be bent. Mean to be something with all your might.—Phillips Brooks.

The nimble lie
Is like the second hand upon a clock;
We see it fly; while the hour-hand of truth
Seems to stand still, and yet it moves unseen,
And wins at last, for the clock will not strike
Till it has reached its goal.
—Longfellow.

Clear and keen perceptions of the mind can be nourished and cultivated in many ways. Fine instincts and quick apprehensions cannot be called suddenly into being where they do not exist; but all instincts may be refined, and all apprehensions may be quickened. Once conscious of the deficiency, we may be on the alert to watch more attentively the effects of our words and deeds, and to avoid the pitfalls into which we have previously fallen. Such exercise, honestly pent in, will help one effectively to translate a kindly heart into kind behavior, and to discontinue the thistle-pricks which give so much useless pain and foster so much heedless ill-will.

THE HOME CORNER.

FREE PATTERN.

By special arrangements with the BAZAR GLOVE-FITTING PATTERNS CO., we are able to supply our readers with the *Bazar Glove-Fitting Patterns* at very low cost. It is acknowledged by every one that these patterns are the simplest, most economical and most reliable patterns published. Full directions accompany each pattern, and our lady readers have been invariably pleased with them in the past. The coupon below must accompany each order, otherwise the pattern will cost the full price.

MASS. PLOUGHMAN COUPON.
Cut this out, fill in your name, address, number and size of pattern desired, and mail it to THE HOME CORNER, MASS. PLOUGHMAN, BOSTON, MASS.

Name
Address
No. of Pattern
Size
Enclose ten cents to pay expenses.



No. 7409.—Ladies' Guimpe Waist. No. 7393.—Six Gored Skirt.

The favorite waist this season shows the guimpe effect and a more graceful or generally becoming style has seldom appeared to the popular taste. Our illustration represents aluminum gray poplin made over yellow taffeta, the yoke and plastron front that simulate the guimpe, and the sleeves being of finely tucked sheer white organdy.

Gray, black and yellow silk embroidered passementerie is used to decorate this handsome gown and the waist is encircled by a French gilt jewelled belt. The body lining, fitted with double darts and other usual seams, closing in center front, is the foundation over which the round yoke facing in back and plastron front that simulate the guimpe, is applied. The plastron is sewed to the right front lining and closes at the left shoulder and under blouse front.

A standing collar of the tucked organdy finishes the neck, closing with front at left shoulder. Stylishly pointed revers roll softly over from the rounded tops of the blouse fronts and rounded epaulettes stand out over the tops of the two seamed sleeves. The fitted linings may be omitted from the sleeves if a transparent effect is desired. The skirt comprises six gores, has a narrow front and two gores on each side, the straight back breadth especially adapting it to wash goods and all thin fabrics. Whether for silk, wool or cotton goods, the simplicity and utility of this recent trends it to home dress makers, and flat bands, ruching, applique embroidery, lace or insertion will form appropriate decoration. To make this waist for a lady of medium size two yards of material forty-four inches wide will be required. The pattern, 7409, is cut in sizes for a 32, 34, 36, 38 and 40-inch bust measure. To make the skirt four and one-eighth yards the same width will be required. The pattern, 7393, is cut in sizes for a 22, 24, 26, 28 and 30-inch waist measure. With coupon, 10 cents each.

This stylish coat is suitable for little boys as well as for girls and may be made of any well chosen material, as the design lends itself readily to either gay or quiet combinations. As here presented it was peculiarly successful in dark blue broadcloth with collar, belt, pocket flaps and cuffs of black velvet edged with a double row of gold braid, one being quarter inch wide and the other a mere cord. The insignia on the shoulders are of the wide and edged with gold braid. Five black silk braid frogs in graduated sizes adorn the front, the loops closing in the centre with brass military buttons. The side back seams and the wrists above the cuffs are decorated with braiding to match. A military looking gilt: clasp closes the belt in centre front. The coat consists of a fitting body having side back portions and a centre back seam, to which is joined a rather circular skirt with deep underlying plaits on each side of the centre back seam and a few gathers under each pocket lap. The coat closes with a good underlap in centre front. The pocket flaps are included in the

seam that joins skirt to waist. The pretty two-seamed coat sleeves have the little fullness at the top disposed in downward plaits at each side of shoulder. The military idea may be lost sight of, the insignia and gold braid omitted, and the coat made of mixed tweed or cheviot, simply decorated with mohair braid or fur, with bone buttons for closing both the fronts and



No. 7497.—Child's Military Coat.

the belt. Although warm coats for children's winter wear are necessary, it is well to avoid heavy materials which burden the little ones and cause them to return from an outing more weary than refreshed. Weight does not always mean warmth and a layer of wadding between soft light weight cloth and its lining of taffeta, percale or nearsilk will give the warmth required without adding to the weight. To make this coat for a child six years old will require two yards of material forty-four inches wide. The pattern, No. 7497, is cut in sizes for children of 4, 6 and 8 years. With coupon, 10 cents.

Velvet toques are shown in so many different styles that the word toque conveys hardly the meaning that it used to have, says Harper's Bazar.

Among the many that are exhibited there are some that are extremely attractive, and all are made with a view to being becoming. The colored velvets are very largely used for this purpose, and the velvet is shirred and puffed so as to look as soft as possible. Bright green is very pretty, and looks especially well combined with black. A dainty green velvet toque is quite small, fits close to the head, and is composed of five or six rows of shirring.

At the left side it turns up with a bow of black satin ribbon and two black ostrich tips that curl over towards the back of the hat. In bright red velvets is another toque somewhat larger, and where it is turned up at the left side there is a rosette of shaded red satin ribbon with a jet buckle in the centre. Still another toque is in two shades of blue velvet, its only trimming two black ostrich tips, and in shape between a turban and a toque. Oddly enough this is not designed for any special gown, but is considered smart with any color—red, brown, green, or blue. There is no question but that these shapes in the colored velvets will be the most popular hats this season. Some are made to wear down over the forehead, but others are put back on the head so as to show the front hair. There are some very small hats of this style which require to be worn on a well-shaped head, as they outline the shape of the head; these are trimmed either with a small tuft of black ostrich tips or two or three stiff quills put on right in front. The velvet bonnets are almost, without exception, in the shape of toques made with shirred crowns or full soft crowns, and with the trimmings directly in front. There are a very few of the stiff bonnet shapes to be seen. Those that are, are not to be rashly recommended, for they require a certain style of profile to be becoming. One of the stiff ones is of royal-blue velvet, somewhat on the poke-bonnet order, shirred wide the brim with wide velvet; outside, on the crown of the hat are three white ostrich tips, and around the crown is a band of white satin ribbon, while tied under the chin is a white satin bow. This is a very trying style of hat, but, if becoming, looks very smart, especially on a well-arranged coiffure.

The new belts for fall dresses are of soft silk or satin ribbon, four inches wide, says an exchange. They are just the length of the waist measure and are clasped in front by buckles not over an inch or an inch and a half wide. The narrow clasp naturally holds the ribbon in folds. At the sides the ribbon is allowed to widen to at least two inches, and in the back nearly the full width of the belt is revealed. This arrangement gives the very long fashioned effect in front which is now so fashionable.

Now that Christmas is approaching, and every woman is wondering what she can make with her own busy fingers, Demore's information concerning new materials for fancy work are of general interest.

Jean, or ticking, in all the delicate colors and shadings, is slowly but surely taking the place that denim has so long and successfully filled. This material bears but slight resemblance to our ideas of ticking, having a smooth, glossy surface, and being firmly and evenly woven, and coming as it does in delicate colors, and entirely without the objectionable odor of the denims, lends itself readily to the making of sofa pillows, table covers, draperies, etc. Embroidery shows up on the smooth, satiny surface to good advantage.

Villa cloth, another of the season's novelties, is rapidly finding favor among the friends of the brown lines. This material is something on the same order, and being somewhat richer in tone, but softer and more pliable, can

be used for draperies and many purposes for which the linens were too stiff.

Canvas for embroidering, just the same kind of canvas that our grandmothers used for making samplers, has been brought out this season, and, as the embroidery is done over a single thread, the work is wonderfully rich and beautiful, closely resembling the woven tapestries. Canvas squares can be obtained with the design partially worked and full directions for finishing, and in some instances the design is complete, the filling in alone being left for the purchaser.

Fish-net is bound to find favor with embroiderers. This is a delicate, lace-like material, which can be purchased for one dollar and twenty-five cents a yard, or in small pieces of the size desired. This is much used with linen embroidery, as it so beautifully fills the places of the Mexican or drawn work, and is so easily applied.

Backram, such as is used by tailors for interlining, is very much used this season for novelties, being especially desirable for handkerchief boxes, photograph frames, etc., as it lends itself readily to either painting or embroidery, and has so much body that it does not need any interlining. It comes in shades of buff, gray and brown.

Professor Wiley, the chemist of the Agricultural Department, presents some statements which are apt to be rather startling to the ordinary housewife. They are somewhat after the English idea of allowing the roast to become tainted before cooking.

"Meats" says he "should never be eaten until they have become properly ripened; that is to say until they are about to decay. A chicken killed today ought to hang three weeks in a cool place before going on the table. The same with other meats; it should be kept three weeks, then there would be no danger of eating diseased meat."

Dr. Wiley is conducting an investigation into the whole question of the dietetic values of meats from all fowls and animals, from the chicken to the horse, that contribute to the life of mankind. It has already covered one year of time and he has only completed his researches into the life and value of a pig. Years to come will be taken up by an inquiry into the value of cattle, sheep, fowl, game, etc.

"This investigation," said Dr. Wiley, "is the first systematic and complete effort ever made in that direction. It has been pursued by what is practically a new method, because we have worked with a full knowledge of the history and growth of the animals. Thus we have been able to obtain a better idea as to nutritive values and chemical constituents. An example of this is that we have found in hogs nitrogen of several kinds, each with different properties while hitherto but one kind of nitrogen has been recognized."

A hard-working, muscular man, who needs heat and energy, should eat plenty of fat meat, but a man of sedentary habits should partake sparingly of it and should consume more lean. The egg is a wonderfully perfect food. Man's mental attitude, however, toward his food has everything to do with his power to digest it and if he does not like it the probability is that it will do him little good, however well balanced it may be. Meat should be kept three weeks; fish and eggs should be eaten the day they are taken, but fish if frozen can be kept. Fish is not a brain food. That is an old idea. The phosphorus needed for the brain comes from vegetables, eggs and plants."

It is difficult to keep a family of children neatly shod unless one has a well filled purse to draw from, says a writer in the Farm, Field and Fireside. From my own experience it pays to buy a fair quality. I have tried buying the 92-cent school shoes and find that a pair of \$1.25 shoes last just twice as long. They are made of finer goods and put together in a much stronger manner and afford a much better foundation for taps and patches. The cheap shoes come to pieces soon; I do not know what the taps are made from, probably there is some leather in them, but a few good soakings and the "shoddy" reveals itself.

One may do a very neat cobbling at home and thus save quite an item during the course of a year. Save the old shoes for patches and heel lifts, as they are needed occasionally. A bottle of leather cement costs fifteen cents, and every farm house should count an iron last among its tools; the reversible ones are best, the small end being used for women's and children's shoes. It is not at all difficult to apply a patch. Cut it from the best portions of a cast off shoe, slice (or scrape thin) the edges, apply the cement, also a coating of cement to the place where the patch is to be put, and allow both to dry for a few minutes, after which stick them together and pound with a hammer or mallet, and it is on to stay, unless you "toast your feet" and shoes in a hot oven. Wetting the shoe will not injure the patch, unless it may be a very thorough soaking in a rainstorm.

Sometimes only a portion of the tap needs renewing, as the majority of children wear first directly under the great toe joint. A piece from the tap of a cast-off shoe is usually sufficiently good for taps. Always remember to save the edges to the patch will have a smooth surface and not feel clumsy when walking.

Thick soles for whole taps may be bought very cheap. Procure brass tacks for this work. Place shoe over the last and tack all about the edges, then cut out with a very sharp knife. This is the only part of cobbling that a woman cannot do nicely, as the greater strength of "John" is needed to trim this around. Of course all rough pieces of tap (old tap) should be previously removed.

In straightening a heel, remove all lifts until you have an even surface; a chisel will enable you to do this easily; pull out the protruding brads with pliers, and then tack on the new lifts, trimming them in shape, if too large. Stain the edges of new tap and heel, look inside the shoe to see if any tacks have come through, pound these down, using the last, and after blacking the shoes the job is finished.

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Girls' shoes are usually made very thin, and for this reason should be replaced soon after they are first worn. If women's and girls' shoes were treated in this way they would last much longer and the wearers would enjoy far better health. Men's taps are just four times as heavy as women's, and yet women are the weaker sex. Right here there is a chance for reform among the shoe manufacturers.

Leathers and rubber boots may be mended in the same manner, using rubber cement and old rubbers for patches. The most economical dressing is made from Diamond dye, using a slate dye; dissolve one ounce of borax and two ounces of gum shellac in a pint of hot water. Set it on the back of the stove, and if after awhile the gum does not wholly dissolve strain it. Moisten the dye powder with a little water and dissolve in the liquid while it is hot, and add one-fourth ounce of glycerine.

Mix thoroughly and apply as you do liquid dressing. This makes a large quantity and costs only one-fourth as much as prepared polish. It is excellent dressing for any leather articles, bags, belts, etc., and also for renewing straw hats and bonnets.

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